



**Additional file 5. Evidence indicating that tonic LPA<sub>1</sub> receptor activity under basal conditions of [<sup>35</sup>S]GTP $\gamma$ S autoradiography is not due to autotaxin activity.** Functional autoradiography using horizontal sections of 4 week-old rat brain was performed using a three-step protocol as detailed in Methods. Exogenous LPA (10  $\mu$ M) was added during step 3 which additionally contained 0.1 % BSA. Incubation of brain sections with the autotaxin substrate lysophosphatidylcholine (LPC) (1  $\mu$ M to 100  $\mu$ M, step 1 or 3 in the presence of 0.1 % BSA) does not affect tonic LPA<sub>1</sub> receptor activity (cc, corpus callosum; fi, fimbria of the hippocampus). Scale bar = 5 mm.